



CS-01-111

January 5, 2004

To: Commissioner for Patents  
P.O.Box 1450  
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572  
28 Davis Avenue  
Poughkeepsie, N.Y. 12603

Subject: | Serial No. 10/676,896 10/01/03 |

Vincent Ho et al.

PROCESS TO MANUFACTURE NONVOLATILE  
MOS MEMORY DEVICE

#### INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation  
In An Application.

The following Patents and/or Publications are submitted to  
comply with the duty of disclosure under CFR 1.97-1.99 and  
37 CFR 1.56.

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being  
deposited with the United States Postal Service as first class  
mail in an envelope addressed to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450, on January 27, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

"A Silicon Nanocrystals Based Memory," Tiwari et al., Appl. Phys. Lett. 68(10), March 4, 1996, pp. 1377-1379, demonstrates quasi-nonvolatile MOS memory devices employing silicon nanocrystal charge-storage sites produced by ion implantation into the gate oxide.

Ya-Chin King et al., "MOS Memory Using Germanium Nanocrystals Formed by Thermal Oxidation of  $\text{Si}_{1-x}\text{Ge}_x$ ," IEDM Tech. Digest, 1998, pp. 115-118, discloses a novel technique of fabricating germanium nanocrystal quasi-nonvolatile memory device.

CS-01-074, Serial No. 10/087,506, Filed March 1, 2002, now issued as U.S. Patent 6,656,792, "Nanocrystal Flash Memory Device and Manufacturing Method Therefor," assigned to a common assignee, discusses using radio-frequency co-sputtering and rapid thermal annealing to form the oxide layer containing germanium nanocrystals.

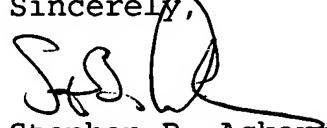
U.S. Patent 6,128,243 to Chan et al., "Shadow Memory for a SRAM and Method," discloses a memory for a SRAM using germanium Nanocrystals.

U.S. Patent 5,783,498 to Dotta, "Method of Forming Silicon Dioxide Film Containing Germanium Nonocrystals," discloses a process to form germanium Nonocrystals.

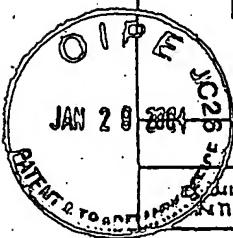
U.S. Patent 6,060,743 to Sugiyama et al., "Semiconductor Memory Device Having Multilayer Group IV Nanocrystal Quantum Dot Floating Gate and Method of Manufacturing the Same," discloses a memory device using germanium Nanocrystals.

U.S. Patent 6,090,666 to Ueda et al., "Method for Fabricating Semiconductor Nanocrystal and Semiconductor Memory Device Using the Semiconductor Nanocrystal," discloses a memory device using germanium Nanocrystals.

Sincerely,



Stephen B. Ackerman,  
Reg. No. 37761



INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

Doctor Number (Spain)

CS-01-111

Leibermann Berlin

10/676, 896

Appleton Vincent Ho et al.

Ending Date

10/01/03

### Groups And Units

U. S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

**OTHER DOCUMENTS** (including Author, Title, Date, Portion or Pages, Etc.)

- Ya-Chin King et al., "MOS Memory Using Germanium Nanocrystals Formed by Thermal Oxidation of  $Si_{1-x}Ge_x$ ", IEDM Tech. Digest, 1998, pp. 115-118.
- "A Silicon Nanocrystals Based Memory", Tiwari et al., Appl. Phys. Lett. 68 (10), pp. 1377 - 1379, March 4, 1996.

EXHIBIT	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.